# MONTANA

# GIS USER DIRECTORY

December, 1989

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Natural Resource Information System

Montana State Library

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# MONTANA

# GIS USER DIRECTORY

## December, 1989

Introduction

In the Spring, 1989, the Montana Natural Resource Information System (NRIS), housed at the Montana State Library in Helena, conducted a survey of government agencies and private organizations in Montana to identify the various activities around the state related to the development of Geographic Information Systems (GIS). The survey was also designed to identify and inventory the GIS applicable data bases (e.g. digital tabular data with usable spatial coordinates) in Montana.

This first edition of the ***Montana GIS User Directory*** presents the results of that survey, providing agency-by-agency descriptions of GIS activities in Montana, including details about current or planned projects, the software and hardware platforms in use, the types of data generated, used or needed, and who to contact to obtain more information about each project. The ***Montana GIS User Directory*** is based solely on the feedback received through the survey, and is not comprehensive of all GIS activities in Montana. NRIS welcomes any information about projects and activities that should be added, and feedback on corrections. A blank form is provided on page ii. Plans are to publish a new edition of the ***Montana GIS User Directory*** annually in conjunction with the Montana GIS conference.

For convenient reference, a compiled list of contacts and addresses for the agencies listed in the **Directory** is provided after the last agency description. The compiled list is in alphabetical order, by agency name.

As for the inventory of GIS-applicable data bases identified in the survey, it is available on floppy diskette from NRIS. Since the ***GIS Data Inventory*** has been designed as a dynamic product, to be maintained and updated regularly, it will not be distributed in hardcopy format. Instead, NRIS will distribute copies of the ***GIS Data Inventory*** on diskette, with each electronic copy dated for reference purposes.

Both the ***Montana GIS User Directory*** and the ***GIS Data Inventory*** have been produced by the NRIS staff at the Montana State Library. The production effort has been made in support of and in cooperation with the Montana Interagency GIS Technical Working Group, which designed the survey form. The members of the Montana Interagency GIS Technical Working Group are listed on page iii.

**Montana GIS Interagency Technical Working Group**

MEMBER AGENCIES

**Montana State Library**
Natural Resource Information System
Geographic Information System
1515 East 6th Avenue
Helena, Montana 59620
(406) 444-5357
Contact: Allan Cox

**University of Montana**
School of Forestry
Missoula, Montana 59812
(406) 243-6456
Contact: Hans Zuuring

**Montana State University**
Department of Earth Sciences
Bozeman, Montana 59717
(406) 994-6907
Contact: John Wilson

**U.S. Soil Conservation Service**
32 East Babcock
Bozeman, Montana 59715
(406) 587-6833
Contact: Stan Hamilton

**U.S. Forest Service**
Regional Office
Box 7669
Missoula, Montana 59807
(406) 329-3492
Contact: Bill Tanke

**U.S. Geological Survey**
Federal Building
301 S. Park Avenue
Helena, MT 59626
(406) 449-5263
Contact: Mike Cannon

**U.S. Fish and Wildlife Service**
CMR National Wildlife Refuge
Box 110
Lewistown, Montana 59457
(406) 538-8706
Contact: Randy Matchett

**U.S. Bureau of Land Management**
222 North 32nd St.
Billings, Montana 59107
(406) 255-2953
Contact: Kathy Jewell

**U.S. Environmental Protection Agency**
301 South Park
Drawer 10096
Helena, Montana 59626
(406) 449-5486
Contact: Lee Shanklin

**U.S. Bureau of Indian Affairs**
316 North 16th Street
Billings, Montana 59101
(406) 657-6145
Contact: Don Luse

**U.S. Department of Energy**
Bonneville Power Administration
Box 3621
Portland, Oregon 97208
(503) 230-3671
Contact: Steve Sherer

**Montana Department of Natural Resources and Conservation, Reserved Water Rights Compact Commission**
1520 E. Sixth Avenue
Helana, MT 59620
(406) 444-6841
Contact: Scot Freburg

*If you have any specific questions on GIS or would like to provide input to the deliberations of this group, we suggest you contact the representative and the agency that is closest or most familiar to you.*

*MAY, 1989*

## CONTACT INFORMATION

**ORGANIZATION:**
Bureau of Indian Affairs

**CONTACT PERSON:**
Don Luse
Area Director

**ADDRESS:**
316 N. 26th Street
Billings, MT 59101

**PHONE:**
(406) 657-6145

## GIS PROJECT

**STATUS:**
x Active x Needs Data Planned

**HARDWARE AND SOFTWARE:**

**Software:** ARC/INFO

**Hardware:** Prime Computer

**PROJECT DESCRIPTION:**
Collect all relevant resource data for reservations within the Billings area---use GIS capabilities to provide any information needed in Integrated Resource Management planning and other planning efforts.

**COMMENTS:**
All of our resource information is not digitized.

## CONTACT INFORMATION

**ORGANIZATION:**
Confederated Salish and Kootenai Tribe

**CONTACT PERSON:**
CloAnn Villegas

**ADDRESS:**
P.O. Box 278
Pablo, MT 59855

**PHONE:**
(406) 675-2700

## GIS PROJECT

**STATUS:**
x Active x Needs Data Planned

**HARDWARE AND SOFTWARE:**

**Software:** ARC/INFO, TIN

**Hardware:** Prime computer 2755 with 2-496 MB hard disks, 8 MB memory, 1 streaming tape drive, Calcomp 1042GT plotter, Monochrome terminals, and three printers.

**PROJECT DESCRIPTION:**
To develop a comprehensive integrated resource plan for the Flathead Reservation.

**COMMENTS:**
An alternate contact is Janet Marko, same phone.

We need information on 7.5 minute quads about soils, habitat, cultural, residential, commercial, inundation areas (from possible dam breaks), snow measurement sites, water quality data, forest insect and disease infestation areas, and road improvements where crossing streams for the Flathead Reservation.

**CONTACT INFORMATION**

**ORGANIZATION:**
Doney & Thorson
Northern Lights Institute

**CONTACT PERSON:**
John E. Thorson

**ADDRESS:**
P.O. Box 1185
Helena, MT 59624

**PHONE:**
(406) 443-7018

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
We are gathering water resource data from the Missouri River Basin for possible compatibility with a basin-wide GIS project.

We're working for the Northern Lights Institute's Missouri River Management project.

**COMMENTS:**

| CONTACT INFORMATION | |
|---|---|
| **ORGANIZATION:**<br>Dept. of Commerce<br>Community Technical Assistance Prog. | |
| **CONTACT PERSON:**<br>Ann Desch | |
| **ADDRESS:**<br>Cogswell Building, Room C-211<br>Capitol Station<br>Helena, MT 59620 | **PHONE:**<br>(406) 444-3646 |

| GIS PROJECT | | |
|---|---|---|
| | **STATUS:** | |
| Active | Needs Data | Planned |
| **HARDWARE AND SOFTWARE:** | | |
| **PROJECT DESCRIPTION:** | | |
| **COMMENTS:** | | |

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. of Health
Water Quality Bureau

**CONTACT PERSON:**
Tom Reid

**ADDRESS:**
Cogswell Building, A-206
Helena, MT 59620

**PHONE:**
(406) 444-2406

**GIS PROJECT**

**STATUS:**
Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

**COMMENTS:**

## CONTACT INFORMATION

**ORGANIZATION:**
Dept. Natural Resources & Conservation
Reserved Water Rights Compact Commis.

**CONTACT PERSON:**
Scott Freburg

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620-2301

**PHONE:**
(406) 444-6843

## GIS PROJECT

**STATUS:**

x Active | x Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**Software:** ARC/INFO, ERDAS, Lotus

**Hardware:** Compaq 386/25; GTCO 36 x 48 Digitizer; Calcomp 8-pen plotter, Data Copy Video Scanner, Tektronix ink jet printer, Cartridge 150 MB Tape Backup, Cipher 9-track tape drive

**PROJECT DESCRIPTION:**

The Reserved Water Rights Compact Commission is authorized to conclude compacts for the equitable division and apportionment of waters between the state and its people and the several Indian tribes claiming reserved water within the state. The commission is separately authorized to conclude compacts with the federal agencies claiming federal reserved water rights in Montana.

Claims are accomplished in part by assessing the natural resources, existing and future irrigated lands and water availability of each project area.

**COMMENTS:**

Fort Belknap Indian Reservation: DEM Data, DLG Data
Northern Cheyenne Indian Reservation: DEM Data, hydrography, transportation, utilities

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation
Facility Siting Bureau

**CONTACT PERSON:**
Tom Ring
Natural & Earth Sci Coord.

**ADDRESS:**
1520 E. Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6785

**GIS PROJECT**

**STATUS:**
Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

**COMMENTS:**

| CONTACT INFORMATION | | |
|---|---|---|
| ORGANIZATION:<br>Dept. Natural Resources & Conservation | | |
| CONTACT PERSON:<br>Greg Ames<br>Hydrosciences Section | | |
| ADDRESS:<br>1520 East Sixth Avenue<br>Helena, MT 59620 | | PHONE:<br>(406) 444-6692 |
| GIS PROJECT | | |
| Active | STATUS:<br>x Needs Data | Planned |
| HARDWARE AND SOFTWARE: | | |
| PROJECT DESCRIPTION: | | |
| COMMENTS: | | |

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation

**CONTACT PERSON:**
Mark Reller

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620-2301

**PHONE:**
(406) 444-6641

**GIS PROJECT**

**STATUS:**
x Active x Needs Data Planned

**HARDWARE AND SOFTWARE:**
**Software:** AUTOCAD, T-Graf terminal emulator

**Hardware:** Compaq 386

**PROJECT DESCRIPTION:**
Real time basin water management. Link water rights database and adjudicated water rights with irrigation water management, priority date enforcement and specialized map making.

**COMMENTS:**
Soils---starting with Musselshell
Hydrography---Surface and Groundwater records
Weather Information---Current and Historic

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation
Water Rights Bureau

**CONTACT PERSON:**
Jim Kindle
Records Section

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6621

**GIS PROJECT**

**STATUS:**
Active | x Needs Data | x Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Integration with water right mainframe database. Possible use with other data and our water rights data via field office PC.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation
Water Resources Division

**CONTACT PERSON:**
Tim Byron
Soil Scientist

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6642

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**

**Software:** Access to an ARC/INFO system. AUTOCAD irrigation designs can be transferred to ARC/INFO and modifications made as development occurs.

**Hardware:** Compaq 386 with T-Graph terminal emulation linked through multiplexer.

**PROJECT DESCRIPTION:**

The project locates and tracks future irrigation development in the Missouri River Basin proposed through the Water Reservation process. Applications for these Water Reservations will be submitted by 25 Conservation Districts. Project Designs are entered using AUTOCAD software and can be transferred to ARC/INFO.

A study to test methodology for inventorying irrigated acres in Montana. Satellite reflectance data would be classified to outline irrigated areas within selected drainage basins. This work would begin by April 1990. Areas would be separated by irrigation method, crop type, water source.

**COMMENTS:**

Area is the Missouri River Basin; Coverages are Conservation District boundaries (County boundaries in most cases); Soil map unit delineations (SCS survey line); Hydrography: Major rivers, tributaries, perennial streams, reservoirs, stream gage locations. An alternate contact person is Bill Grieman.

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation

**CONTACT PERSON:**
Chuck Dalby

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6644

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**
**Software:** AUTOCAD at present; possible conversion to ARC/INFO

**Hardware:** IBM PS2, Compaq 386, Zenith 386, Kurta IS-1 and IS-3 digitizing tablets

**PROJECT DESCRIPTION:**
Assessment of temporal and spatial distribution of irrigated land in Powder River watershed over 1950-85 period; develop database for water balance, salinity and return flow modeling.

A possible future project involves use of Landsat imagery for seasonal monitoring of irrigated lands.

**COMMENTS:**
We need data which can only be derived from aerial photography in successive years.

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation

**CONTACT PERSON:**
John Tubbs
Economist

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6832

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

Coverages such as Land Ownership; Electric Power Distribution; NOAA Weather Station locations and associated attribute data; Land Use; Reservoir Site locations, functions, and capabilities; FERC Hydropower License sites; and Irrigated Lands retrievable by water source are needed.

The above mentioned coverages would aid in mapping water requirements for hydro-power and agriculture across the state. The timing of a specific project or study depends somewhat on legislative action and is difficult to determine.

We have a Compaq 386 with T-Graf emulator system that is capable of tying into ARC/INFO software.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation
Water Management Bureau

**CONTACT PERSON:**
Mark Shapley

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6636

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
The time is undetermined at this point. Within the next year, the WMB will be initiating efforts to integrate a variety of existing hydrogeologic information on a drainage basin scale (e.g., the Flathead Valley) with the eventual objective of developing regional ground-water flow models suitable for management purposes. Organization of spatially distributed data will be a key part of this effort. We will be promoting the collection of new field data that may be suitable for GIS manipulation, as well as looking for better ways to organize and work with existing databases such as the ground-water information center's files. Spatially arranged data describing aquifer flow characteristics and ground-water quality come to mind.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Dept. Natural Resources & Conservation
Water Management Bureau

**CONTACT PERSON:**
Denise DeLuca
Hydrologist

**ADDRESS:**
1520 East Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6790

**GIS PROJECT**

**STATUS:**
Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Coverages are needed for the Missouri River watershed---headwater through eastern state border. Hydrologic, climatic, topographic, land use, geographic, vegetative, water quality, and groundwater quality, etc.

I would like to see someone use GIS for water availability modeling and related water reservations work in the Missouri River basin.

**COMMENTS:**

| CONTACT INFORMATION | | |
|---|---|---|
| ORGANIZATION:<br>Dept. Natural Resources & Conservation | | |
| CONTACT PERSON:<br>Larry Cawfield | | |
| ADDRESS:<br>1520 East Sixth Avenue<br>Helena, MT 59620 | | PHONE:<br>(406) 444-6640 |
| GIS PROJECT | | |
| | STATUS: | |
| Active | x Needs Data | x Planned |
| HARDWARE AND SOFTWARE: | | |
| PROJECT DESCRIPTION:<br>Would like to have irrigated area, precipitation isohyetes, basin and subbasin boundaries, average basin elevation, and water rights information accessible via GIS. | | |
| COMMENTS: | | |

**CONTACT INFORMATION**

**ORGANIZATION:**
Environmental Quality Council

**CONTACT PERSON:**
Deborah Schmidt

**ADDRESS:**
Capitol Station
Helena, MT 59620

**PHONE:**
(406) 444-3742

**GIS PROJECT**

**STATUS:**
Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Gallatin County Planning

**CONTACT PERSON:**
Bill Murdock

**ADDRESS:**
P.O. Box 1905
Bozeman, MT 59715

**PHONE:**
(406) 585-1465

**GIS PROJECT**

**STATUS:**

x Active | x Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Ken Weaver, John Wilson and Judy Mathre of the Montana State University's Local Government Program (Wilson Hall, Bozeman) have applied for a U.S. West grant to develop a GIS for Gallatin County. They already have the hardware and software---please direct specific questions to them on these matters---but the grant proposal is to design a useful GIS for the county and assemble a database.

**COMMENTS:**
Any information on Gallatin County would be appreciated.

**CONTACT INFORMATION**

**ORGANIZATION:**
Great Divide Graphics

**CONTACT PERSON:**
Ed Madej

**ADDRESS:**
324 Fuller, C-3
Helena, MT 59601

**PHONE:**
(406) 442-3559

**GIS PROJECT**

**STATUS:**
x Active
x Needs Data
Planned

**HARDWARE AND SOFTWARE:**
**Software:** MAPMAKER, ADOBE ILLUSTRATOR ff, PAGEMAKER 3.0

**Hardware:** MacIntosh II computer with Graphics tablet, Laserwriter IINT, 70 MB hard disk

**PROJECT DESCRIPTION:**
Project 1: Wildlife mapping of the Glacier/Bob Marshall ecosystem

Project 2: Natural resource mapping of the Greater Yellowstone ecosystem

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
GeoResearch, Inc.

**CONTACT PERSON:**
Douglas Richardson

**ADDRESS:**
2815 Montana Ave
Billings, MT 59101

**PHONE:**
(406) 248-6771

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**
**Hardware:** 3 SUN Workstations--Networked together with IBM ATs. DEC VAX 11-780. Trimble GPS recievers. Geolink (TM) interface between EPS and GIS. ARC/INFO GIS software on workstations and PCs. CalComp Digitizers and wide Bed Color Plotters.

**PROJECT DESCRIPTION:**
1) Agricultural Management
2) Environmental Data Base development & impacts analysis
3) Air Quality permitting
4) Hazardous Waste-Spill Clean-up Monitoring

Many Future projects planned

**COMMENTS:**
Alternate contact is: Clarence Chan, same phone.

We have the data for above projects but could use more data on mineral sources.

**CONTACT INFORMATION**

**ORGANIZATION:**
Historical Society

**CONTACT PERSON:**
David Schwab
Archeologist

**ADDRESS:**
225 N. Roberts
Helena, MT 59620

**PHONE:**
(406) 444-7715

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Looking toward statewide coverage in GIS to accommodate management of cultural resource data for the state of Montana. Coverage needed includes flora, fauna, geology, water, elevational topography, landforms, etc. These data would be incorporated in predictive models of cultural resource site locations.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Lewis & Clark County Planning

**CONTACT PERSON:**
Robert Rasmussen

**ADDRESS:**
P.O. Box 1725
Helena, MT 59624

**PHONE:**
(406) 443-1010 ext. 374

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

A specific time frame has not been established. I expect a phased development period of three to five years, involving several county agencies. Applications would be in county land planning with emphasis on urban development. Specific areas of application may include: transportation planning, community demographics, public school facilities mapping, parcel mapping, floodplain management, hazard mitigation, police and fire protection services, capital improvements planning, data management, etc. Local databases will need to be developed; however, it is hoped that other databases from the USGS, Census Bureau, State Library, State Department of Revenue, and other sources can be utilized.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Lewistown Planning

**CONTACT PERSON:**
Elly Walkowiak
Director

**ADDRESS:**
Fergus County Courthouse
712 West Main Street
Lewistown, MT 59457

**PHONE:**
(406) 538-9046

**GIS PROJECT**

**STATUS:**

Active | x Needs Data | x Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
We cannot plan a GIS project in the near future due to cost restraints, etc. In the mean time, we would like to be informed of active GIS projects.

Project: Lewistown, Montana; Comprehensive Land Use Plan

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Missoula County Surveyor's Office

**CONTACT PERSON:**
Douglas Burreson

**ADDRESS:**
Missoula, MT 59802

**PHONE:**
(406) 721-5700 ext. 279

**GIS PROJECT**

**STATUS:**

x Active | Needs Data | x Planned

**HARDWARE AND SOFTWARE:**

**Software:** AUTOCAD, MICROSURVEY

**Hardware:** 386 DOS based PCs.

**PROJECT DESCRIPTION:**

We are currently converting to an electronic base map for Missoula County. It will be used to fulfill a rural addressing program contract with Mountain States Telephone and possibly as the base for future endeavors.

In one to five years, for county administration (i.e. land planning, taxation and assessment, facilities management, demographics)

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Dept. of Fish, Wildlife, and Parks
Wildlife Division

**CONTACT PERSON:**
Bob Martinka

**ADDRESS:**
Fish, Wildlife and Parks Building
Helena, MT 59620

**PHONE:**
(406) 444-3677

**GIS PROJECT**

**STATUS:**
x Active | Needs Data | x Planned

**HARDWARE AND SOFTWARE:**
**Software:** Forest Service software

**Hardware:** Forest Service hardware

**PROJECT DESCRIPTION:**
Data analysis on Grizzly Bear research project---using FS hardware, software, and topo/geographic data.

Expanded use of GIS capabilities is being reviewed at this time.

**COMMENTS:**
Alternate contacts are: Terry Lonner, 8-126-6363 (FTS)
Henry Jorgensen, 994-6363
Sandy Fiance, 444-2612
John Weigand, 444-2612
Bill Hoskins, 8-126-4042
Dan Stinson, 444-3755

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Legislative Council

**CONTACT PERSON:**
Robert Person
Executive Director

**ADDRESS:**
State Capitol
Room 138
Helena, MT 59620

**PHONE:**
(406) 444-3064

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

For supporting the activities of the Districting and Apportionment Commission.

This support involves analyzing alternative legislative districts, preparing maps and data for public presentation, and finally preparing maps and data for final submission of a plan. Work begins Spring 1991 and ends Winter 1993.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Montana Power Company

**CONTACT PERSON:**
Mike Leary

**ADDRESS:**
40 East Broadway
Butte, MT 59701

**PHONE:**
(406) 723-5421 ext. 2298

**GIS PROJECT**

**STATUS:**

Active | x Needs Data | x Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Facilities mapping system is now in the research stage.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Montana Power Company

**CONTACT PERSON:**
Paul J. Bauer

**ADDRESS:**
1903 Russell Street
Missoula, MT 59801

**PHONE:**
(406) 549-2301 ext. 4179

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**
**Software:** "In-House" written DSM

**Hardware:** Prime Mainframe, Terminals
H.P. 7580 Plotter

**PROJECT DESCRIPTION:**
To provide automated mapping, electrical load analysis modeling, facilities inventory and maintenance scheduling.

A PC based facilities mapping system for gas and electric facilities.

**COMMENTS:**
We would like detailed data for all urban areas ideally; anywhere that gas and electric transmission and distribution lines go.

**CONTACT INFORMATION**

**ORGANIZATION:**
Montana Power Company

**CONTACT PERSON:**
Mike Bausch

**ADDRESS:**
40 East Broadway
Butte, MT 59701

**PHONE:**
(406) 723-5421 ext. 2293

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Hopefully sometime between April 1990 and October 1990---management of our transmission and distribution system.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Montana State University
Geographic Information & Analysis Ctr.

**CONTACT PERSON:**
Dr. John P. Wilson
Professor

**ADDRESS:**
Earth Science Department
Montana State University
Bozeman, MT 59717

**PHONE:**
(406) 994-6907
FTS 126-3331

**GIS PROJECT**

**STATUS:**
x Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**
**Software:** ARC/INFO, Soil Survey Information System (SSIS), IDRISI

**Hardware:** Zenith 386 PCs, CalComp digitizers, CalComp 8-color pen plotter

**PROJECT DESCRIPTION:**
Numerous projects; objectives vary with source of funding and/or subject matter of funded grants.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Montana State University
Department of Plant and Soil Science

**CONTACT PERSON:**
Jerry Neilson
Professor

**ADDRESS:**
Department of Plant and Soil Science
Montana State University
Bozeman, MT 59717

**PHONE:**
(406) 994-5075

**GIS PROJECT**

**STATUS:**
x Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**Software:** In-house MAPS (Montana Agricultural Potentials System).

**Hardware:** VAX

**PROJECT DESCRIPTION:**

MAPS---Montana Agricultural Potentials System. We have divided the state of Montana into rectangles measuring about 8 square miles. Each of these rectangles contains data on several dozen land and climatic characteristics such as precipitation, land use, elevation, geology, soils, vegetation, consumptive use of water, etc.

**COMMENTS:**

Alternate contacts are: Cliff Montagne, Joe Caprio, Bob Snyder, and Ginger Schmid. An alternate phone number is: 994-4601.

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Bureau of Mines and Geology

**CONTACT PERSON:**
Robert N. Bergantino

**ADDRESS:**
West Park Street
Butte, MT 59701

**PHONE:**
(406) 496-4150

**GIS PROJECT**

**STATUS:**

Active | x Needs Data | x Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Probably 1990; digitizing/electronic format for geologic maps.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Dept. of Agriculture
Environmental Management Division

**CONTACT PERSON:**
Phil Johnson
Botanist

**ADDRESS:**
Sixth and Roberts
Agriculture/Livestock Building
Helena, MT 59620

**PHONE:**
(406) 444-5427

**GIS PROJECT**

**STATUS:**

x Active | x Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
In 1984, the MDA received a grant from the U.S. EPA to study possible groundwater contamination by pesticides. The database contains information on wells sampled by MDA and the results of chemical analysis for each well.

**COMMENTS:**

| CONTACT INFORMATION | | |
|---|---|---|
| ORGANIZATION:<br>MT Dept. of Administration<br>Information Services Division | | |
| CONTACT PERSON:<br>Randy Holm | | |
| ADDRESS:<br>Mitchell Building<br>Room 24<br>Helena, MT 59620 | | PHONE:<br>(406) 444-2824 |
| GIS PROJECT | | |
| Active | STATUS:<br>Needs Data | Planned |
| HARDWARE AND SOFTWARE: | | |
| PROJECT DESCRIPTION: | | |
| COMMENTS: | | |

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Dept. of Highways
Engineering Division

**CONTACT PERSON:**
Robert S. Custer
PLS

**ADDRESS:**
2701 Prospect Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6020

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
Will provide densification of the National Geodetic Network as a database for GIS-LIS systems, will provide LIS data on new highway locations.

INTERGRAPH hardware and software will be used.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Dept. of Highways

**CONTACT PERSON:**
Don Cromer
Rural Planning Section

**ADDRESS:**
2701 Prospect Avenue
Helena, MT 59620

**PHONE:**
(406) 444-6103

**GIS PROJECT**

**STATUS:**
x Active
x Needs Data
Planned

**HARDWARE AND SOFTWARE:**
**Software:** INTERGRAPHS World Mapping System (WMS), Distributed Graphics Software (DGS)

**Hardware:** INTERGRAPHS Interview 220 C dual screened work station with a backlighted 48" x 60" digitizing table.

**PROJECT DESCRIPTION:**
Have the ability to display graphically the data stored on our Mainframe and PCs.

**COMMENTS:**
We are contemplating the purchase of U.S.G.S. Digital Line Graphs (DLG) and possibly some Digital Elevation Models (DEM) for the entire state.

We have all the data for the GIS projects we are currently working on, but we do not have all the data for other GIS projects we will be working on.

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Dept. of State Lands
Reclamation Division

**CONTACT PERSON:**
Bonnie Lovelace
Strip Mining Bureau

**ADDRESS:**
1625 11th Avenue
Helena, MT 59604

**PHONE:**
(406) 444-2074

**GIS PROJECT**

**STATUS:**
x Active
x Needs Data
Planned

**HARDWARE AND SOFTWARE:**
**Software:** ARC/INFO, AUTOCAD

**Hardware:** IBM compatible PC's linked to Prime via modem.

**PROJECT DESCRIPTION:**
Assemble coal area environmental data to use for cumulative hydrologic impact assessments related to coal mining.

**COMMENTS:**
We need data for the Powder River area/Eastern Montana. Data gaps are not fully identified.

**CONTACT INFORMATION**

**ORGANIZATION:**
MT Dept. of State Lands
Forestry Division

**CONTACT PERSON:**
Brian Long

**ADDRESS:**
2705 Spurgin Road
Missoula, MT 59801

**PHONE:**
(406) 542-4323

**GIS PROJECT**

**STATUS:**

x Active | x Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**Software:** PAMAP

**Hardware:** IBM PS/2 Model 80

**PROJECT DESCRIPTION:**

To evaluate forest resource management alternatives.

**COMMENTS:**

Swan River State Forest in Lake County. We need the following digitized layers: section lines, roads, streams, lakes, ownership, contour lines, soil association and geology.

**CONTACT INFORMATION**

**ORGANIZATION:**
National Park Service
Glacier National Park

**CONTACT PERSON:**
Carl H. Key

**ADDRESS:**
Glacier National Park
West Glacier, MT 59936

**PHONE:**
(406) 888-5441

**GIS PROJECT**

**STATUS:**

x Active | x Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**Software:** UNIX, GRASS, SAGIS, MS DOS, dBASE III +, In-House Software for digitizing, plotting, vector file manipulations, VICAR/IBIS

**Hardware:** SUN 386i, IBM PC, IBM 3090-200

**PROJECT DESCRIPTION:**

Multi-layered geographic data base available for interagency use and capable of addressing diverse resource issues on parkwide and regional scales.

**COMMENTS:**

The area covered is approximately 113 degrees to 114 degrees 45 minutes longitude, 48 degrees 10 minutes to 49 degrees latitude.

We meed information on soils, geology, DEM (have DMA) elevation, any Landsat TM or SPOT imagery, post 1980 aerial photography.

**CONTACT INFORMATION**

**ORGANIZATION:**
Natural Resource Information System
Geographic Information System

**CONTACT PERSON:**
Allan Cox
GIS Coordinator

**ADDRESS:**
1515 East Sixth Avenue
Helena, MT 59620

**PHONE:**
(406) 444-5357

**GIS PROJECT**

**STATUS:**
x Active x Needs Data Planned

**HARDWARE AND SOFTWARE:**
**Software:** ARC/INFO, TIN Module, ERDAS

**Hardware:** 2 Tektronix 4111 graphic terminals, Compaq 386 PC with a hi-resolution monitor, a Zenith PC with Tektronix Terminal Emulation, PRIME 2755 mini-computer, CalComp 9100 Digitizing Table, CalComp 1044 8-pen plotter, Tektronix 4696 Ink-Jet Printer, Tektronix 4235 Workstation

**PROJECT DESCRIPTION:**
1) Provide GIS support for state and federal project managers on the Clark Fork Superfund sites.
2) Develop GIS capabilities for the Water Quality Bureau in the Montana Department of Health and Environmental Sciences.

**COMMENTS:**
An alternate contacts is Gerry Daumiller, phone 444-5357.

We need large scale DLGs & DEMs for the Clark Fork River.

**CONTACT INFORMATION**

**ORGANIZATION:**
Oikos Work

**CONTACT PERSON:**
Steven R. Holloway

**ADDRESS:**
Box 8412
315 South Fourth East
Missoula, MT 59807

**PHONE:**
(406) 542-0535

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**
In transition to another system

**PROJECT DESCRIPTION:**
Wildlife, land ownership, and rare/endangered habitat(s)

Map and determine land in important habitat to wildlife, habitat, etc.

**COMMENTS:**
Rocky Mountain Front and Greater Yellowstone Ecosystem.

**CONTACT INFORMATION**

**ORGANIZATION:**
University of Montana
School of Forestry

**CONTACT PERSON:**
Hans Zuuring

**ADDRESS:**
University of Montana
GIS Laboratory
Missoula, MT 59812

**PHONE:**
(406) 243-6456

**GIS PROJECT**

**STATUS:**
x Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**Software:** PAMAP GIS software, FoxBASE+ DBMS, DOS 3.3 operating system

**Hardware:** 10 MHz 80286 and 25 MHz 80386 AT business PC, EGA or VGA display cards, multisync color monitors, 150 MB hard disks, 60 MB cartridge tape backup units, 12" x 12" digitizing tablets, and dot matrix printers. Additionally, a Calcomp 1043GT plotter and a CalComp 95360 digitizing table.

**PROJECT DESCRIPTION:**

The main objective of the project is to develop an operational GIS-based management and analysis system for the School of Forestry's Lubrecht Experimental Forest. In addition, the system will be used to teach graduate level courses in GIS technology and applications, and to complement existing courses in integrated resource management and natural resource planning.

**COMMENTS:**

## CONTACT INFORMATION

**ORGANIZATION:**
University of Montana
Dept. of Anthropology

**CONTACT PERSON:**
Thomas A. Foor

**ADDRESS:**
University of Montana
Department of Anthropology
Missoula, MT 59806

**PHONE:**
(406) 243-2693

## GIS PROJECT

**STATUS:**
x Active
Needs Data
Planned

**HARDWARE AND SOFTWARE:**

**Software:** ODYSSEY

**Hardware:** VAX

**PROJECT DESCRIPTION:**
Provide a comprehensive Atlas and Index of Montana prehistoric and historic sites

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
University of Montana
School of Forestry

**CONTACT PERSON:**
Dr. Steven W. Running

**ADDRESS:**
University of Montana
Missoula, MT 59801

**PHONE:**
(406) 243-6311

**GIS PROJECT**

**STATUS:**
x Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**
**Software:** ERDAS 1024 Image Processing System

**Hardware:** Compaq 38 PC with Tapedrive (6250 bpi), Digitizing Tablet, and Video Digitizer

**PROJECT DESCRIPTION:**
Modelling and mapping forest growth at regional scales, particularly in Western Montana.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Bureau of Land Management

**CONTACT PERSON:**
Kathie Jewell

**ADDRESS:**
222 N 32nd Street
Billings, MT 59107

**PHONE:**
(406) 255-2953

**GIS PROJECT**

**STATUS:**
x Active
x Needs Data
Planned

**HARDWARE AND SOFTWARE:**

**Software:**MOSS

**Hardware:** Prime Computer, Altek Tablets, Graphon and Pericon Terminals, Calcomp Plotters.

**PROJECT DESCRIPTION:**
Resource Management Plan (RMP) - analysis as access to public lands
Oil and Gas Field Maps
Allotment Management
Coal Tract Analysis
Riparian Analysis

**COMMENTS:**
We need various themes based on the different projects that we are currently working on.

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Bureau of Mines
Western Field Operations Center

**CONTACT PERSON:**
Larry Reigel

**ADDRESS:**
East 360 Third Avenue
Spokane, WA 99202

**PHONE:**
(509) 353-2735

**GIS PROJECT**

**STATUS:**
x Active | x Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**Software:** ARC/INFO, Version 3.2.1; dBASE III + for text input

**Hardware:** DELL System 310 with external tape drive (40 MB), 3.5 in 1.44 drive 5.5 in 360 KB drive, 20 MHE, 322 MB hard drive, 4 MB RAM, 2400 BAUD HC MODEM, CALCOMP 1044 Plotter, ALTEK DATATAB Digtizer with AC40 controller.

**PROJECT DESCRIPTION:**

Inventory of Federal Mineral Land in the eleven Western States and Alaska to determine their availability for mineral exploration and development.

PROJECT NAME: Inventory of Land Use Restraints Program

ACRONYM: ILURP

COMPLETION DATE: Currently end of FY 90 (could change)

**COMMENTS:**

We need the following information for the entire state: Digitized Public Land Survey (PLS) to section level; Political Boundaries; Land Management Themes (Federal---e.g. WSA's, ACEC's, Critical wildlife habitat withdrawals, Environmentally sensitive areas)

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Bureau of Reclamation
Environmental Affairs Division

**CONTACT PERSON:**
Dan Jewell

**ADDRESS:**
Great Plains Regional Office
316 North 26th Street
Billings, MT 59101

**PHONE:**
(406) 657-6870

**GIS PROJECT**

**STATUS:**
x Active
Needs Data
Planned

**HARDWARE AND SOFTWARE:**
**Software:** ARC/INFO

**Hardware:** PC, Compaq 386/20, Calcomp 9100

**PROJECT DESCRIPTION:**
Analyze distribution of contaminants at Anaconda Smelter NPL Site.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Bureau of Reclamation
Land & Environmental Resource Branch

**CONTACT PERSON:**
Larry Todd

**ADDRESS:**
Montana Projects Office
2525 4th Avenue North
Billings, MT 59101

**PHONE:**
(406) 657-6688

**GIS PROJECT**

**STATUS:**

| | | |
|---|---|---|
| Active | x Needs Data | x Planned |

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

By early FY90, we will have archeological inventories, irrigation project facilities, easements, ownerships, etc.

We are in the process of acquiring a PC with ARC/INFO & a 386-based PC.

We'll be covering the Milk River Service Area.

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Dept. of Agriculture
Soil Conservation Service

**CONTACT PERSON:**
Kristin Gerhart

**ADDRESS:**
10 East Babcock, Room 438
Bozeman, MT 59715

**PHONE:**
(406) 587-6968

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**

**Software:** GRASS

**Hardware:** AT&T 386 based computers

**PROJECT DESCRIPTION:**

Build state soils layer as soon as possible.
1:250,000 "STATSGO" soils maps for entire state are being digitized by M.S.U. for SCS.
1:24,000 detailed soil maps are being digitized by other state and federal agencies.

Fall 1989---STATSGO and detailed soils (1:24000) are priority layers
---acreage counts and highly erodible land determinations are priority projects

**COMMENTS:**

Eventually, we want to obtain data layers from other agencies, providing the exchange mechanism(s) are in place.

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Environmental Protection Agency

**CONTACT PERSON:**
Lee Shanklin

**ADDRESS:**
Federal Building
301 S. Park Ave, Rm 292, Drawer 10096
Helena, MT 59620

**PHONE:**
(406) 449-5486

**GIS PROJECT**

**STATUS:**
x Active x Needs Data Planned

**HARDWARE AND SOFTWARE:**
**Software:** ARC/INFO, ERDAS

**Hardware:** VAX mini computer with a variety of "Sun Tektronix" terminal and workstations.

Additional information can be obtained from the EPA EMSC-LV Lab; AMS Division in Las Vegas, Nevada.

**PROJECT DESCRIPTION:**
To create a GIS Information Management System for the Blackfoot River watershed to incorporate watershed level impact model results in that system to demonstrate the use of this Information Management System to support the resource management decision process.

**COMMENTS:**
Primarily soils digitized for 20 7.5 minute quads in the Blackfoot Watershed.

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Forest Service
Northern Region Headquarters

**CONTACT PERSON:**
Dick Roullier
Director

**ADDRESS:**
200 East Broadway
P.O. Box 7669
Missoula, MT 59801

**PHONE:**
(406) 329-3593

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**
**Software:** SPATIAL; Software is currently being installed (April 1989), or will be advertized for in the next 18 months

**Hardware:** Currently being installed or advertised for in next 18 mos.

**PROJECT DESCRIPTION:**
To implement GIS technology at the Ranger District levels.

Project level implementation is occurring on a number of Ranger Districts.

Early 1991 with both software/hardware.

**COMMENTS:**
Currently gathering data from different sources and also doing some scanning and digitizing for individual projects. i.e. Grizzly cumulative effects, Park Ranger District EIS, etc.

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Fish and Wildlife Service
C.M. Russell Wildlife Refuge

**CONTACT PERSON:**
Randy Matchett

**ADDRESS:**
Box 110
Airport Road
Lewistown, MT 59457

**PHONE:**
(406) 538-8706

**GIS PROJECT**

**STATUS:**
x Active x Needs Data x Planned

**HARDWARE AND SOFTWARE:**
**Software:** MOSS, should be receiving EPPL-7 and ARC/INFO soon.

**Hardware:** IBM PCs, Prime

**PROJECT DESCRIPTION:**
Wildlife management, Prairie Dogs, Prairie Grouse, Black-footed Ferrets, big game, refuge management, waterfowl management

Ongoing Projects related to Prairie Dogs, Blackfooted Ferrets, Sharp-tailed Grouse ecology, Waterfowl enhancement and management, and livestock grazing management

**COMMENTS:**
We have data from 47 degrees, 109 degrees (SW) to 49 degrees, 104 degrees (NE)---Everything, but basically vegetation, wetlands, wildlife, elevation, land ownership, land use, roads, etc

**CONTACT INFORMATION**

**ORGANIZATION:**
U.S. Geological Survey

**CONTACT PERSON:**
Mike Cannon

**ADDRESS:**
301 S. Park Avenue
Drawer 10076
Helena, MT 59626

**PHONE:**
(406) 449-5263

**GIS PROJECT**

**STATUS:**
Active | Needs Data | Planned

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**

**COMMENTS:**

**CONTACT INFORMATION**

**ORGANIZATION:**
Yellowstone County Planning Dept.

**CONTACT PERSON:**
Bill Arnold

**ADDRESS:**
510 North Broadway
Fourth Floor
Billings, MT 59101

**PHONE:**
(406) 657-8246

**GIS PROJECT**

**STATUS:**

| Active | x Needs Data | x Planned |
|---|---|---|

**HARDWARE AND SOFTWARE:**

**PROJECT DESCRIPTION:**
GIS proposal currently being researched---hope to have system underway by June 1990. Expect GIS to better manage property information and improve comprehensive planning by combining natural resource and other information.

**COMMENTS:**

# Index of GIS Contacts in Montana

Following is a compiled list of the names, addresses, and phone numbers of the contacts included in this Directory. The list is in alphabetical order, by agency name.

Bureau of Indian Affairs
Luse, Don, Area Director
316 N. 26th Street
Billings, MT 59101
(406) 657-6145

Confederated Salish and Kootenai Tribe
CloAnn Villegas
P.O. Box 278
Pablo, MT 59855
(406) 675-2700

Doney & Thorson
Northern Lights Institute
Thorson, John E.
P.O. Box 1185
Helena, MT 59624
(406) 443-7018

Dept. of Commerce
Community Technical Assistance Prog.
Desch, Ann
Cogswell Building, Room C-211
Capitol Station
Helena, MT 59620
(406) 444-3646

Dept. of Health
Water Quality Bureau
Reid, Tom
Cogswell Building, A-206
Helena, MT 59620
(406) 444-2406

Dept. Natural Resources & Conservation
Reserved Water Rights Compact Commis.
Freburg, Scott
1520 East Sixth Avenue
Helena, MT 59620-2301
(406) 444-6843

Dept. Natural Resources & Conservation
Facility Siting Bureau
Ring, Tom, Natural & Earth Sci Coord.
1520 E. Sixth Avenue
Helena, MT 59620
(406) 444-6785

Dept. Natural Resources & Conservation
Anes, Greg, Hydrosciences Section
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6692

Environmental Quality Council
Schmidt, Deborah
Capitol Station
Helena, MT 59620
(406) 444-3742

Gallatin County Planning
Murdock, Bill
P.O. Box 1905
Bozeman, MT 59715
(406) 585-1465

Dept. Natural Resources & Conservation
Reller, Mark
1520 East Sixth Avenue
Helena, MT 59620-2301
(406) 444-6641

Dept. Natural Resources & Conservation
Water Rights Bureau
Kindle, Jim, Records Section
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6621

Dept. Natural Resources & Conservation
Water Resources Division
Byron, Tim , Soil Scientist
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6642

Dept. Natural Resources & Conservation
Dalby, Chuck
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6644

Dept. Natural Resources & Conservation
Tubbs, John, Economist
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6832

Dept. Natural Resources & Conservation
Water Management Bureau
Shapley, Mark
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6636

Dept. Natural Resources & Conservation
Water Management Bureau
DeLuca, Denise, Hydrologist
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6790

Dept. Natural Resources & Conservation
Cawfield, Larry
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6640

Great Divide Graphics
Madej, Ed
324 Fuller, C-3
Helena, MT 59601
(406) 442-3559

GeoResearch, Inc.
Richardson, Douglas
2815 Montana Ave
Billings, MT 59101
(406) 248-6771

Historical Society
Schwab, David, Archeologist
225 N. Roberts
Helena, MT 59620
(406) 444-7715

Lewis & Clark County Planning
Rasmussen, Robert
P.O. Box 1725
Helena, MT 59624
(406) 443-1010374

Lewistown Planning
Walkowiak, Elly, Director
Fergus County Courthouse
712 West Main Street
Lewistown, MT 59457
(406) 538-9046

Missoula County Surveyor's Office
Burreson, Douglas
Missoula, MT 59802
(406) 721-5700279

MT Dept. of Fish, Wildlife, and Parks
Wildlife Division
Martinka, Bob
Fish, Wildlife and Parks Building
Helena, MT 59620
(406) 444-3677

MT Legislative Council
Person, Robert, Executive Director
State Capitol
Room 138
Helena, MT 59620
(406) 444-3064

Montana Power Company
Leary, Mike
40 East Broadway
Butte, MT 59701
(406) 723-54212298

Montana Power Company
Bauer, Paul J.
1903 Russell Street
Missoula, MT 59801
(406) 549-23014179

Montana Power Company
Bausch, Mike
40 East Broadway
Butte, MT 59701
(406) 723-54212293

Montana State University
Geographic Information & Analysis Ctr.
Wilson, Dr. John P., Professor
Earth Science Department
Montana State University
Bozeman, MT 59717
(406) 994-6907FTS 126-3331

Montana State University
Department of Plant and Soil Science
Neilson, Jerry, Professor
Department of Plant and Soil Science
Montana State University
Bozeman, MT 59717
(406) 994-5075

MT Bureau of Mines and Geology
Bergantino, Robert N
West Park Street
Butte, MT 59701
(406) 496-4150

MT Dept. of Agriculture
Environmental Management Division
Johnson, Phil, Botanist
Sixth and Roberts
Agriculture/Livestock Building
Helena, MT 59620
(406) 444-5427

MT Dept. of Administration
Information Services Division
Holm, Randy
Mitchell Building
Room 24
Helena, MT 59620
(406) 444-2824

MT Dept. of Highways
Engineering Division
Custer, Robert S., PLS
2701 Prospect Avenue
Helena, MT 59620
(406) 444-6020

MT Dept. of Highways
Cromer, Don, Rural Planning Section
2701 Prospect Avenue
Helena, MT 59620
(406) 444-6103

MT Dept. of State Lands
Reclamation Division
Lovelace, Bonnie, Strip Mining Bureau
1625 11th Avenue
Helena, MT 59604
(406) 444-2074

MT Dept. of State Lands
Forestry Division
Long, Brian
2705 Spurgin Road
Missoula, MT 59801
(406) 542-4323

National Park Service
Glacier National Park
Key, Carl H.
Glacier National Park
West Glacier, MT 59936
(406) 888-5441

Natural Resource Information System
Geographic Information System
Cox, Allan, GIS Coordinator
1515 East Sixth Avenue
Helena, MT 59620
(406) 444-5357

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315 South Fourth East
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University of Montana
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Zuuring, Hans
University of Montana
GIS Laboratory
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(406) 243-6456

University of Montana
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Foor, Thomas A.
University of Montana
Department of Anthropology
Missoula, MT 59806
(406) 243-2693

University of Montana
School of Forestry
Running, Dr. Steven W.
University of Montana
Missoula, MT 59801
(406) 243-6311

U.S. Bureau of Land Management
Kathie Jewell
222 N 32nd Street
Billings, MT 59107
(406) 255-2953

U.S. Bureau of Mines
Western Field Operations Center
Reigel, Larry
East 360 Third Avenue
Spokane, WA 99202
(509) 353-2735

U.S. Bureau of Reclamation
Environmental Affairs Division
Jewell, Dan
Great Plains Regional Office
316 North 26th Street
Billings, MT 59101
(406) 657-6870

U.S. Bureau of Reclamation
Land & Environmental Resource Branch
Todd, Larry
Montana Projects Office
2525 4th Avenue North
Billings, MT 59101
(406) 657-6688

U.S. Dept. of Agriculture
Soil Conservation Service
Gerhart, Kristin
10 East Babcock, Room 438
Bozeman, MT 59715
(406) 587-6968

U.S. Environmental Protection Agency
Shanklin, Lee
Federal Building
301 S. Park Ave, Rm 292, Drawer 10096
Helena, MT 59620
(406) 449-5486

U.S. Forest Service
Northern Region Headquarters
Roullier, Dick, Director
200 East Broadway
P.O. Box 7669
Missoula, MT 59801
(406) 329-3593

U.S. Fish and Wildlife Service
C.M. Russell Wildlife Refuge
Matchett, Randy
Box 110
Airport Road
Lewistown, MT 59457
(406) 538-8706

U.S. Geological Survey
Cannon, Mike
301 S. Park Avenue
Drawer 10076
Helena, MT 59626
(406) 449-5263

Yellowstone County Planning Dept.
Arnold, Bill
510 North Broadway
Fourth Floor
Billings, MT 59101
(406) 657-8246